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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
1300 I STREET, NW
WASHINGTON, DC 20005

EXAMINER

BANGACHON, WILLIAM L

ART UNIT PAPER NUMBER

2635

DATE MAILED: 08/25/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,403

Applicant(s)

TURNER ET AL.

Examiner

William Bangachon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/7/04 have been fully considered but they are not persuasive. The claims are broader than what applicant argues.
2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **"the tags are muted *immediately* after the reader has locked onto a targeted tag ..."** (paragraph bridging pages 10 and 11); **the tags are transmitting only a part of a digital sequence** (page 11, 5th paragraph); **"the first few bits or the last few bits of the first part of the digital sequence, which may not include any information"** (paragraph bridging pages 11 and 12); **"the first part of the sequence is merely to enable the reader to lock onto and synchronize with the relevant tag"** (page 12, 1st and 3rd paragraphs)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
3. Applicant's arguments with respect to claims 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These rejection is based on applicants arguments that **“the tags of Reis is programmed to respond to the reader based on allocated time slot”** (paper #8, paragraph bridging pages 10 and 11) and therefore fails to disclose **“causing the reader to broadcast a mute signal to mute all of said transponders not yet transmitting”**, as claimed (page 11, 2nd paragraph), since **“the tag of Reiss is programmed automatically to await its respective allocated time slot during the listen period to respond to the reader”** (page 11, 1st paragraph). The specification states the system of the instant invention operates on half-duplex principles (page 10, line 15; page 11, lines 20-23). Since the tag of the instant invention is not programmed to respond to the reader based on allocated time slot, as argued by the applicant. And the system operates on half-duplex principles, it is therefore unclear in the claims and the specification how the reader mutes the transponders not yet transmitting, and how the reader caused said one transponder to transmit a remainder of the sequence, as claimed.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,686,902 (Reis et al).

In claims 1, 3, 4, and 7, a method of reading a plurality of transponders (8-x) forming part of an electronic identification system (fig. 1) also comprising a reader (7), the method comprising the steps of:

- causing the reader to lock onto a first part of a digital sequence being transmitted by one of said transponders {col.15, lines 22-26; col. 17, lines 43-53};
- causing the reader to broadcast a mute signal to mute all of said transponders not yet transmitting {col.16, lines 7-17; col. 48, lines 6-21};
- causing the reader to transmit a separate first command to cause said one transponder to transmit a remainder of the sequence {col. 47, lines 7-16; col. 48, lines 22-25; col. 12, lines 59-65}; and
- receiving and reading said remainder of the sequence at the reader {col.47, lines 17-33; paragraph bridging cols. 48 and 49; col. 44, lines 22-37}.

In claim 2, a method as claimed in claim 1 wherein upon receipt and reading of said remainder of the sequence, the reader is caused to transmit a second command to cause said one transponder to switch to a sleep mode wherein said one transponder no

longer transmits any part of the sequence and to unmute the muted transponders {col. 7, lines 30-33; lines 41-50}.

In claim 5, a method as claimed in claim 4 wherein each transponder transmits the respective first parts of the respective digital sequences after respective hold-off periods after the start signal {col. 7, lines 6-16, lines 36-47; paragraph bridging cols. 43 and 44; cols. 33 and 34, step [92]}.

In claim 6, a method as claimed in claim 5 wherein the respective hold-off periods are randomly generated periods {col. 8, lines 3-12}.

In claims 8-9, a method as claimed in claim 1 wherein the first command is transmitted within a first time window after said one of said first parts has been transmitted. The second command is transmitted within a second time window after said remainder of the sequence has been read {col. 6, line 62-col. 7, line 26; col. 8, lines 12-17}.

Claim 10 recites a system for practicing the method of claim 1, further comprising;

the reader (fig. 2) comprising a controller (102), a transmitter (103-M) for transmitting signals to the transponder population and a receiver (101-M) for receiving

response digital sequences from the transponder population {col. 9, line 40-col. 11, line 54};

Claims 11-15 recites a system for practicing the method of claims 2-3 and 7-9 and therefore rejected for the same reasons.

Claim 16 recites the reader of claim 10 and therefore rejected for the same reasons.

Claim 17 recites the transponder (fig. 3) of claim 10, further comprising:
a modulator (3)
a demodulator (1) {col. 11, line 57-col. 12, line 21} and
a controller (2) for the modulator and demodulator {col.12, line 51-col. 13, line 20}.

11. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,686,902 (Reis et al) in view of USP 6,661,336 (Atkins et al).

Claim 18 recites the limitations of claim 1 and therefore rejected for the same reasons. Reiss does not disclose expressly **“while said one transponder is still transmitting said first part, causing the reader to broadcast a mute signal to mute all of said transponders not yet transmitting”**. Atkins, in the same file of endeavor

(RFID systems), teach of the above feature as shown in figures 3, 5, and 9 {Atkins, col. 3, lines 20-29; col. 5, lines 57-64}. These features are desirable in the system of Reiss because this reduces wasted time due to transmission pollution {Atkins, col. 3, lines 5-8}. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to mute all other transponders not yet transmitting while an active transponder is still transmitting a first part of a digital sequence, as claimed, because this reduces wasted time due to transmission pollution, as evidenced by Atkins.

Claims 19 and 20 recites a system for practicing the method of claim 18 and therefore rejected for the same reasons.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USP 5,986,570 (Black et al) is cited in that it teaches of a method for resolving collisions between multiple RFID in a field {see whole document}.

Examiner Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bangachon whose telephone number is 703-305-2701. The examiner can normally be reached on 4/4/10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9314 for regular and After Final formal communications. The examiner's fax number is 703-746-6071 for informal communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

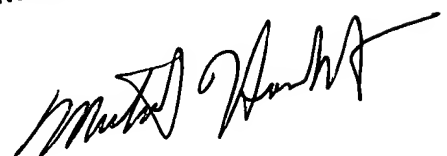
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William L Bangachon
Examiner
Art Unit 2635

August 23, 2004

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read "Michael Horabik", written in a cursive style.